

Large infrastructure projects in the context of transboundary environmental impact

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The practice of recent years has shown more large-scale infrastructure projects physically located in more than one country, so on October 10 the Brussels Energy Club held a meeting dedicated to the environmental impact of such projects. The first part of the meeting presented the applicable EU and international legal framework for assessing the environmental impact (without prejudice to precluding compliance of any project with the applicable EU requirements). The second part illustrated the case study of the Nord Stream 2 Pipeline (NSP2) project. The speakers were Milena Novakova, Legal and Policy Officer in the Directorate-General for Environment (DG Environment) at the European Commission and Simon Bonnell (picture), Head of Permitting at Nord Stream 2 AG.

"Large-scale transboundary projects" are projects which are implemented in at least two countries, or having at least two states of origin, that are likely to cause significant effects on the environment or significant transboundary impact because of their nature, size and location: pipelines, industrial facilities, chemical plants, long distance railway lines, airports, motorways, airports etc.

The Nord Stream 2 Pipeline (NSP2) was chosen as a case where this aspect can be assessed in practice: it is planned to deliver 55 billion m³/year of natural gas to the EU through the two-pipeline system (similar to the Nord Stream Pipeline built in the 2000s) that spans from Russia through the Baltic Sea to Germany⁽¹⁾. It runs through the jurisdictions of Russia, Finland, Sweden, Denmark and Germany, while the potential transboundary effects may concern Estonia, Latvia, Lithuania and Poland. So far, more than 2100 km or over 80% of the overall length of the pipeline have been laid.

Such a large infrastructure project, that can affect the environment in 9 Baltic Sea states directly or indirectly, is obliged to seek approvals from five countries and to be assessed by all 9 countries through public consultations and information sharing between governments.

Internationally, this process relies on the UN Convention on Environmental Impact Assessment in a Transboundary Context (the Espoo Convention)⁽²⁾, that currently has 45 parties: the EU, all EU member states and most of the countries from the neighbourhood. Within the EU's



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jurisdiction, the EIA process has been regulated by the EU Environmental Impact Assessment Directive (EIA) since 1985, that has been subject to several amendments, the last one in 2014⁽³⁾. The importance of the EIA in international law as a distinct and freestanding obligation has reached the status of customary international law, which means that it is not merely a treaty-based obligation but a requirement of general international law. The developers of such projects with potential impact in more than one EU member state have to submit their application with description of the factors likely to be significantly affected by the project, assess potential transboundary impacts to other national jurisdictions, and propose measures to prevent and mitigate potential adverse impact. As part of the EIA procedure, public consultations and exchange of information with other member states are obligatory steps before getting the permit.

The application of the EIA Directive has wider socio-economic costs, even though the fixed administrative costs for an EIA are low – the average costs are estimated at 1% to the total costs of a project⁽⁴⁾. EIA is considered by the European Commission as a tool in achieving Sustainable Development Goals, as it takes on board concerns of various environmental stakeholders in an inclusive way. Multilateral cooperation between the states around environmental and socio-economic impacts of transboundary projects is necessary: states often have different legal systems and EIA procedures, not all of them are bound by the Espoo Convention and the process of authorisation involves different stakeholders within a state: national, regional and local authorities, NGOs and the public.

NSP2 developed the national EIAs for each country, with a separate transboundary report for all countries, looking on what the impact of the pipeline is on the Baltic Sea as a region. Public consultations were held in the 9 respective countries - in Denmark three times for three different

routes. The interest in the countries was different. In Finland, the public attention was much higher during the first Nord Stream project, because that first offshore project in the Baltic Sea mobilised people. This time, the curiosity was very high in Poland, mostly as a result of the high-level engagement of the Polish government around the NSP2 – so high that the Poles even came to consultations in Denmark. Russia has not ratified the Espoo Convention, but has committed to be a party for consultation procedure for the NSP2.

Most of the 170 comments that emerged from the consultations came in from national authorities and NGOs. Of key concern was the issue of impact from the underwater noise on marine mammals from munition clearance. There is a lot of munition on the seabed in Finland, because of its strategic position between Germany and the Soviet Union during the WW2. Munitions clearance was needed to ensure that the pipeline can be safely installed and operated when it was not feasible to avoid munitions through rerouting. Clearance can lead to the risk of temporary or permanent loss in hearing sensitivity in marine mammals, also with potentially significant transboundary impacts. The NSP2 chose to mitigate this impact by application of bubble curtains, compressors that release small air bubbles, creating a temporary effect that can significantly reduce noise. Similar issue was raised within Sweden's marine area of the Natura 2000 nature reserve where there was a fear that noise from construction works could negatively interfere between a mother and calf of harbour porpoise, during the breeding period. To avoid the risk of such impact, during the most sensitive period NSP2 committed to stopping all works between June and August.

But NSP2 does more than just the compulsory work. The company sponsored a study on ringed seals in the Gulf of Finland to identify their most important patterns in feeding, breeding, resting, in cooperation with experts from Estonia

and Russia contributing to research of the international marine organisation, HELCOM. Moreover, NSP2 will share a large amount of the collected marine data with the European Marine Observation and Data Network (EMODnet), that collects such data in Europe and makes it available to public.

One of the purposes of public consultations is reaching agreements with other stakeholders that have interests on the route of the pipeline. NSP2 established agreements with professional fishermen and will monitor fishing patterns to ensure that no impacts to fishing occurs and in some jurisdictions pay an annual fishery fee. With cable owners and authorities, the company had to negotiate how to arrange the crossings and in future NSP2 cannot unduly obstruct or block construction of other infrastructures.

During the route setting and pipe laying, the company made dozens of historical discoveries, but two are particularly interesting: a Russian aircraft from the WW2 in the Finnish Exclusive Economic Zone, and a Swedish 500 years old ship wreck, in good condition, sitting upright on the seabed. Both discoveries were surveyed by the local archeologists, while NSP2's task was to ensure that there is no interaction between the pipeline operations and the historical site.

NSP2 had received all permits in Germany, Finland, Russia, Sweden, but the process was stuck in Denmark for a couple of years. NSP2 had filed the first application in 2017 for the route through the Danish territorial waters, but due to a change of the law and subsequent lack of response from the ministry of Foreign Affairs, the company had decided to file applications for two other routes in 2018 and 2019. Just a couple of weeks after the event in the Brussels Energy Club, the company finally received a permit from the Danish Energy Agency⁽⁵⁾.

The costs of the EIA might be a burden for developers, but the procedure and results can add to social acceptance and also build confidence with authorities and civil and academic societies. However, there are significant environmentally related costs that are not part of the EIA process but implemented through the planning and implementation of the project – like the choice of the route in the case of NSP2, one of the most important things in reducing environmental impact, and the pipeline vessels. NSP2 research vessels had sailed more than 50,000 kilometres to conduct surveys and underwater investigations to determine a safe and environmentally friendly route.

The Nord Stream gas pipeline projects (NSP and NSP2) have demonstrated that investing resources in prevention can help them avoid any transboundary environmental impact and hence facilitate permitting, but the case also provides a social licence to operate in a broader geographical area. Moreover, this project is a good practical example for the EU and its member states, as there is still only limited practical experience applying the EIA procedure in a transboundary context. The experience gained shows how fundamentally important corporate transparency and public awareness really are for such projects.

- 1) Nord Stream 2 AG is established in Switzerland by Gazprom. Financial investors of the project are ENGIE, OMV, Royal Dutch Shell, Uniper and Wintershall Dea, and the estimated capital expenditure is 8 billion EURO.
- 2) Signed in 1991 in the Finnish city of Espoo.
- 3) Directive 2011/92/EU, as amended by Directive 2014/52/EU, <https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1415798290429&uri=CELEX:02011L0092-20140515>
- 4) Executive summary of the impact assessment, European Commission, 2012 <https://ec.europa.eu/environment/ia/pdf/ExSumm%20IA%20SWD-2012-354.pdf>
- 5) "Nord Stream 2 Granted a Construction Permit by Denmark", 30 October 2019, <https://www.nord-stream2.com/media-info/news-events/nord-stream-2-granted-a-construction-permit-by-denmark-139/>



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Le baromètre mensuel PwC est stable par rapport au mois précédent, la confiance restant en berne en zone euro et le moral plutôt bas au Luxembourg malgré des résultats économiques encourageants.

Le Luxembourg enregistre une croissance relativement élevée au 3^{ème} trimestre, avec une augmentation du PIB de 3,7% par rapport à l'année précédente; portée par les secteurs des services aux entreprises, de l'information et de la communication ainsi que du commerce. Elle est également soutenue par la demande interne: en effet, l'indexation des salaires de l'été 2018 ajoutée au faible taux de chômage a relancé la progression des revenus des ménages luxembourgeois. Malgré les taux d'intérêts au plus bas, l'investissement est lesté par le contexte d'incertitude commerciale et géopolitique. De plus, du fait de la diminution des prix de l'énergie, l'inflation au Luxembourg recule pour atteindre 1,3% sur un an.

Dans la zone euro, l'activité économique se stabilise au troisième trimestre; le PIB enregistrant une croissance de 0,2% selon Eurostat. La stabilisation de la croissance contredit les anticipations de ralentissement exprimées par de nombreux analystes en raison de l'incertitude liée au Brexit, l'affaiblissement de la croissance des marchés émergents, ainsi que de la montée du protectionnisme. Les échanges commerciaux restent en berne, notamment dans le secteur manufacturier où l'activité se replie pour le neuvième mois consécutif. En Allemagne particulièrement, les droits de douane imposés par les Etats-Unis sur les importations automobiles pèsent sur l'indice PMI. Ce dernier enregistre en octobre son niveau le plus faible depuis un an à 41,7. Dans ce contexte de stabilisation de l'activité et d'incertitude généralisée, les acteurs économiques perdent confiance dans les perspectives de croissance de la zone euro. Selon l'indicateur ESI, la détérioration de la confiance provient des secteurs de l'industrie, des services et du commerce de détail.

En conséquence, la BCE motive ses nouvelles mesures de politique monétaire accommodante par le besoin de stimuler l'activité de la zone euro. Par ailleurs, l'inflation de la zone euro ralentit pour atteindre 0,7% en octobre. Comme au Luxembourg, le ralentissement de l'inflation résulte notamment d'une baisse des prix de l'énergie. Finalement, sur le marché du travail, malgré l'engorgement de la croissance, le taux de chômage de la zone euro se maintient à 7,5%, son niveau le plus faible depuis juillet 2008.

Le Baromètre Mensuel PwC, en collaboration avec AGEFI Luxembourg, est un indicateur de confiance économique qui se veut être un outil simple et pragmatique visant à capter chaque mois l'atmosphère économique du Grand-Duché.

Cet indicateur combine les résultats de l'enquête de conjoncture réalisée par le STATEC sur les perspectives d'évolution de la production industrielle au Luxembourg avec ceux de l'institut de recherche allemand ZEW sur le sentiment économique des analystes et investisseurs pour la zone euro.

L'évolution du baromètre au cours des quatre dernières années est représentée par le graphique ci-dessous.

